\*109476\*

Page 1

Novembér-21-1.	3 2:28:43 PM		1(1)	14 / N					
Item ID: Revision ID:	D4093-3		Accept	*N900	<u>0401</u>	<b>OO*</b>	Setup Start	14721	
Item Name: Start Date: Required Date: Reference:	Bracket  11/21/13	11 M		Cust Item l Customer:	ID:	·		' *NS2*	
Approvals:	Process Plan: ML		Tooling: SPC (Y/N):		ate:		Run Star Stop	"NR1"	
Sequence ID/ Work Center I	Operation Description		Set Up/ Run Hours	Tool ID	Tool# P	lan Accept code Qty	Reject Qty	Reject Insp. Number Stamp	
Draw Nbr	Revision Nbr								
110 <b>1 * 11 0 *</b> Waterjet	. ·	Memo	0.00			_/Û	0_0	Jm13-	<b>G</b> -///-
FLOW CNC Water	50×6·00"	CUT AS DWG DWG REV: PROG REV:				,			
		***HOLES WILL BE MADE ON  ****DEBURR****	MILLING***						
*120 *120*	• • • • • • • • • • • • • • • • • • •	et parts off machine FAI/FAIB	0.00 ,			10	0	Jm13.	<b>G</b> ≛D-
QC Quality Control		Memo	0.00						

Pro

DQA:	$\overline{\wedge}$		Date:			WORK ORDER NON	-CC	ONFOI	RMANCE / UPDATE	Wo	ork Order up	odate only	DART
		109 4	1	ΨΙ		DISPOSITION			AGAIN		PARTMENT		
Part	No.	13-	93 -			Rework Scrap Use-as-is Suspected Unapproved		l	Skid-tube Crosstu  Machining Small I  noforming Finish  Large Fab Compos	Fab		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root Cause		Date	Step	Qty	.Desci	ription of work order update or non-conformance		nitial ief Eng	Action Description	:	Sign & Date	Verification	QC Inspector
Design Doc/Data Equip/Toolir Handling/Pr Material Operator Offset/Setul Process Supplier Training Transport Unapprovec	ng Ng	क्वाबाहा क	BO		OTA	ROKE CENTER DRILL  ADRILLED FROM  ER SIDE. HAS  VAL COUNTERSINA.  DTV D  Openator eller	29 13	45 27 -89 111	#10.04		BX 13-12-01	DAS 27 9-89 (S) U) (S)	DAS 27 9-89 13 12 (3)
		_					FA	ULT CA	TEGORY				
Lan	ding	Bending Centre No Cracks Crimp/Kir Cuffs Crushing Heat Trea Inspection Marks/Ch	nk/Ripple nt n Strip in natter equence	:/Wave		General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspect Instruc Misali Mislab Misrea Off-set Out of	tion Incomplete/Unqualified tions Incomplete/Unclear gned/off center eled d		Outside Dim Over/Under Part Incorre Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ct issing	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
		  Wave/Tw	•			Fit/Function		Out of	Sequence				

Work Orden					*10	19476*			<b>,</b>				Page 2
Item ID: Revision ID:	D4093-3				Accept	*N9000	າ40	100	)*	Setup	Start		S1*
Item Name:	Bracket		_								Stop	*N:	S2*
Start Date: Required Date:	11/21/13 11/21/13	Start Qty: Req'd Qty:		*4* *4*		Cust Item IE Customer:	);						
Reference:										Run	Start	-L-1	
Approvals:	Process Pl	an:		Date:	Tooling:	Dat	te:			Kun		I <b>V</b> I	R1*
	QC:			Date:	<b>SPC (Y/N):</b>	Dat	te:				Stop	*N	R2*
Sequence ID/ Work Center II	D·	Operation Description	•		Set Up/ Run Hour	Tool ID	Tool #	Plan Code	Accep Qty	t Re		Reject Number	Insp. Stamp
*130* Mill Conv		Me	mo		0.00	13-11-	-30		1		<i>b</i>		
Conventional Millin	ng Machine	DR	ILL AND C	'SINK AS PER DWG		/			8	2	_		
132		QC2- Inspect pa	arts off mach	nine FAI/FAIB	0.00	1 /28			9	//	1		
*132* QC Quality Control		Me	mo		0.00 13	13-11-3	Ø		18		2		
Quanty Control								<b>₩</b>	$\overline{}$				$\sqrt{\chi}$

0.00

0.00

B.A 13/12/06

QC8- Inspect parts - second check

Memo

135

\*135\*

Quality Control

Pro

rd_	Date:	14/01	02				_				TRAG
XH	13 Date:	/12/	17	WORK ORDER NON	-CC	ONFO	RMANCE / UPDATE	Worl	k Order up	odate only	AEROSPACE
100				DISPOSITION				_	ARTMENT	_	
D4	1097	3~3	3	Rework Scrap Use-as-is Suspected Unapproved		1	Machining Small Fab			d. Eng. Coor.	Engineering Quality Other
Date	Step	Qty	Desci	iption of work order update or non-conformance	l .		Action Description		Sign & Date	Verification	QC inspector
13/12/5	130	5	to De	lerance. to ±0,030 tolorane	13/	12 149	Acceptable.  ± 0.020 is accepte  an \$33335 hie  cen for this. Won 4  affect assombly	56	DAS 12 9-89 13/12/5	13/12/06 13/12/06	Sho 13/12/6
•			•		FA	ULT CA	TEGORY			•	
Cracks Crimp/Kir Cuffs Crushing Heat Trea Inspection Marks/Ch Turning S	nk/Ripple at n Strip in natter equence	:/Wave		General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish		Grain Hardwa Inspect Instruc Misalia Mislaba Misrea Off-set Out of	are ion Incomplete/Unqualified tions Incomplete/Unclear gned/off center eled d Calibration	P P	over/Under art Incorre art Lost/Mi art Moved ositioned V	tolerance ct issing	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
	Date  13/12/5  Date  Gear Bending Centre Not Cracks Crimp/Kin Cuffs Crushing Heat Treat Inspectio Marks/Ch Turning S	Date:  10947  D409= 13-3334  Date Step  Bending Centre Not Concer Cracks Crimp/Kink/Ripple Cuffs Crushing Heat Treat Inspection Strip in Marks/Chatter Turning Sequence	Date: //2/ D476  D4093  J3-3334  Date Step Qty  Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence	D4093-3  13-3334.  Date Step Qty  Description  Date Step Qty  Description  Particular  Cup  As Description  Cup  Cup  As Description  Cup  As Description  Cup  As Description	WORK ORDER NON    13	WORK ORDER NON-CO    13	WORK ORDER NON-CONFOIL    Date   1/2   1/7     DISPOSITION     Rework   Scrap   Use-as-is   Suspected Unapproved     Date   Step   Qty   Description of work order update   Or non-conformance     Date   Step   Qty   Description of work order update   Or non-conformance     Date   Step   Qty   Description of work order update   Or non-conformance     Date   Step   Qty   Description of work order update   Or non-conformance     Date   Step   Qty   Description of work order update   Initial     Chief Eng     Date   Step   Qty   Description of work order update   Or non-conformance     Date   Step   Qty   Description of work order update   Or non-conformance     Date   Step   Qty   Description of work order update   Or non-conformance     Date   Step   Qty   Description of work order update   Or non-conformance     Date   Step   Qty   Description of work order update   Initial     Chief Eng   Date   Step   Qty   Date   Date	WORK ORDER NON-CONFORMANCE / UPDATE    109476	WORK ORDER NON-CONFORMANCE / UPDATE    Date   /2 / / / /	WORK ORDER NON-CONFORMANCE / UPDATE  Work Order up  109476  Disposition  Rework Scrap  Use-as-is / Suspected Unapproved  Date Step Oty Description of work order update or non-conformance or non-conforman	WORK ORDER NON-CONFORMANCE / UPDATE  Work Order update only  Description  Rework  Description of work order update Ornon-conformance  Date Step Qty  Description of work order update Ornon-conformance  Date Step Qty  Description of work order update Ornon-conformance  Date Step Qty  Description of work order update Ornon-conformance  Date Step Qty  Description of work order update Ornon-conformance  Date Step Qty  Date Step Qty  Description  Date Verification  Action Sign & Action Date Verification  Date Verification  Action Date Verification  Date Verificati

Work Order ID 109476 \*109476\* Page 3 November-21-13 2:28:43 PM Item ID: D4093-3 Accept \*N900040100\* Setup Start **Revision ID:** Stop Item Name: Bracket \*4\* **Start Qty: 4.00 Start Date:** 11/21/13 **Cust Item ID:** Required Date: 11/21/13 Req'd Qty: 4.00 Customer: Reference: Run Date: **Approvals:** Process Plan: Tooling: Date: Stop Date:\_\_\_\_\_ SPC (Y/N): QC: Date: Sequence ID/ Operation -Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. **Work Center ID** Description ? Qty Number Stamp **Run Hours** Code Qty Chemical Conversion Coat per QSI005 4.1 140 . , , 0.00 68 76 13-129 \*140\* HandFinish 0.00 Memo Hand Finishing DAS 27 OC7-Inspect Chemical Conversion Coat 160 0.00 \*160\* OC Memo **Quality Control** Identify as per dwg & Stock Location: 51270 0.00 170 8x DAS 13-12-10 \*170\* 0.00 Packaging Memo

Packaging

Pro

DQA: QA Closed:	hul-	Date:	18/12 18/12	4/19 1 <del>-</del> 1/	WORK ORDER NON	-cc	ONFOF	RMANCE / U		ork Order up	odate only	DART
Work Order:	100	14	76	7	DISPOSITION			·	AGAINST DE	PARTMENT	/PROCESS	
Part No	DH	093	3-2	3_	Rework Scrap X Use-as-is Suspected Unapproved		Therm	Skid-tube  Machining  noforming  Large Fab	Crosstube Small Fab Finishing Composite	1	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root Cause	Date	Step	Qty	Desc	ription of work order update or non-conformance	1	nitial iief Eng		tion ription	Sign & Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved	18/146	170	1	£ 7	10.201 holes crc measured/drilled non wrong end	0.1.94	AS 2 39 /12/6	SCRAT		12 989 13-12/06 13/12/6	٠٠٠ ا	entro tolalo
Landing	Gear				General	FA	ULT CA	regory	· · · · · · · · · · · · · · · · · · ·			
	Bending Centre No Cracks Crimp/Kin Cuffs Crushing Heat Trea Inspectio Marks/Ch	nk/Ripple at n Strip in natter	e/Wave		Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes		Grain Hardwa Inspect Instruct Misalia Mislaba Misread Off-set	ion Incomplete/U ions Incomplete/ gned/off center eled d	/Unclear	Outside Dim Over/Under Part Incorre Part Lost/M Part Moved Positioned V Power Loss/	tolerance ct issing Wrong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
-	Wave/Tu	•		Finish			4	Seguence				

Work Ore					*109	476*							Page 4
Item ID: Revision ID: Item Name:	D4093-3 Bracket				Accept	*N900	<b>040</b>	100	)*	Setup	Start Stop		S1* S2*
Start Date: Required Dat Reference:	11/21/13	Start Qty Req'd Qt		*4* *4*		Cust Item I Customer:	D:					IV	<b>5</b> /
Approvals:	Process P	lan:		Date:	Tooling: SPC (Y/N):		ate:			Run	Start Stop		R1* R2*
Sequence ID/ Work Center 180 *180* QC			n	Work Order Release	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty	-	Reject Number	Insp. Stamp

Quality Control

MB-12-10

DQA:			Date:						_				TRAGE
						WORK ORDER NON-	-CC	ONFO	RMANCE / UPDAT				AEROSPACE
QA Closed:			Date:					_		Wo	ork Order up	date only	
Work Orde	r.					DISPOSITION			AG	GAINST DE	PARTMENT	PROCESS	
Work Orde	٠				·	Rework	ıİ		Skid-tube Cro	osstube		Water Jet	Engineering
Part N	lo.					Scrap		1		nall Fab	Pro	d. Eng. Coor.	Quality
	•					Use-as-is		Therr	noforming Fi	inishing	Rec/Stor	e/Packaging	Other
NCR N	lo.					Suspected Unapproved			Large Fab Com	nposite		Supplier	J L
Root					Desc	ription of work order update		nitial	Action		Sign &		
Cause	ı	Date	Step	Qty		or non-conformance	Ch	ief Eng	Description	1	Date	Verification	QC Inspector
Design													
Doc/Data							Į						
Equip/Tooling							1						
Handling/Pre													
Material													
Operator	_												
Offset/Setup	$\dashv$												
Process													
Supplier													
Training						•							
Transport							1						
Unapproved		<u> </u>	<u> </u>	<u> </u>	L		FΔI	UIT CA	TEGORY			<u> </u>	<u> </u>
Landi	nø (	Gear				General							
		Bending			Г	Bend	Г	] Folio/I	Program		Outside Dim	ensions	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain	•		Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect	· · · · · · · · · · · · · · · · · · ·		are -		Part Incorred	cí –	Temperature/Cure
	П	Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Unqualif	fied	Part Lost/Mi	issing	Weld
		Cuffs				Contamination		4	tions Incomplete/Unclea		Part Moved		Wrong Stock Pulled
		Crushing				Countersink		Misali	gned/off center		Positioned V	Vrong	
		Heat Trea	at			Cut Too Short		Mislab	eled		Power Loss/	Surge	Other
		Inspectio	n Strip in	Tube		Drawing	ng Misread						
		Marks/Ch	natter			Drill Holes	off-set						
		Turning S	equence			Finish	Out of Calibra		Calibration				<u></u>
		Wave/Tw	ist in Tub	эе		Fit/Function	Out of Sequence						

## **Picklist Print**

November-21-13 2:28:43 PM

Work Order ID:

109476

Parent Item:

D4093-3

Parent Item Name:

Bracket

**Start Date:** 11/21/13

Required Date: 11/21/13

Start Qty: 4.00

Required Qty: 4.00

**Comments:** 

IPP REV:A NEW ISSUE 10-10-04 JLM VERIFIED BY:DD

598 11-06-05 JLM VERIFIED BY:DD

IPP REV:B AS PER REV C 11.09.28 JLM VERIFIED BY:DD

IPP REV:C 12.10.31 AS PER

IPP REV:B AS PER ECN 11-

DWG REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
<b>M6061T6B0.750X06.000</b> 6061T6 BAR .750 X 6.00		Purchased	No				f	59.6100	Contraction	13/	6		Jm3-11-3
				<b>Location</b>		Loc Qty	<u>Lo</u>	c Code					
				MAT005		59.61							
				1:	20866	22.38							
				1	21380	1.23							
				n	1127216	36			<del>1)</del> ,	0 <u>16</u> F			

DQA:			Date:			WORK OPDER NON	~	SALEO	DRAANCE / LIDDATE				DART
QA Closed:			Date:			WORK ORDER NON-	٠. د د	JINFO	RIVIANCE / UPDATE	W	ork Order up	date only	AEROSPACE
Mante Onde						DISPOSITION			AGAINS	ST DE	PARTMENT	/PROCESS	
Work Orde	er: -					Down orly .	ı		Skid-tube Crosstub	<u>,</u>	1	Water Jet	Engineering
Part N	۱o. ِ					Rework Scrap			Machining Small Fa	ıb	4	d. Eng. Coor.	Quality
NCR N	۱o. ِ					Use-as-is Suspected Unapproved		Therr	noforming Finishir Large Fab Composi		Rec/Sto	re/Packaging Supplier	Other
Root					Desc	ription of work order update	Ī	nitial	Action		Sign &	:	
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling			:				1						
Handling/Pre				,									
Material					i								
Operator					ļ		ļ						
Offset/Setup			. '				Ì						
Process													
Supplier													
Training													
Transport													
Unapproved				<u>.</u>	<u> </u>								
							FA	ULT CA	TEGORY		···		
Landi	ng (	Gear				General		•		_	-	_	
		Bending				Bend		Folio/	Program	<u> </u>	Outside Dim	ensions	Pressure/Forced
		Centre No	ot Concer	ntric	L	BOM/Route	Grain				Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect	<u></u>	Hardw	are		Part Incorre	cí _	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspec	tion Incomplete/Unqualified		Part Lost/M	issing	Weld
<u> </u>		Cuffs				Contamination		Instruc	tions Incomplete/Unclear	<u> </u>	Part Moved		Wrong Stock Pulled
	L	Crushing			L	Countersink		Misali	gned/off center	L	Positioned V	_	_
]		Heat Trea	at			Cut Too Short		Mislab	eled	L	Power Loss/	Surge	Other
		Inspectio	n Strip in	Tube	L	Drawing		Misrea	nd		-		
	L	Marks/Ch	natter			Drill Holes		Off-set	<b>:</b>				
		Turning S	equence			Finish		Out of	Calibration				
		Wave/Tw	ist in Tul	be		Fit/Function	<b>—</b>		Sequence				

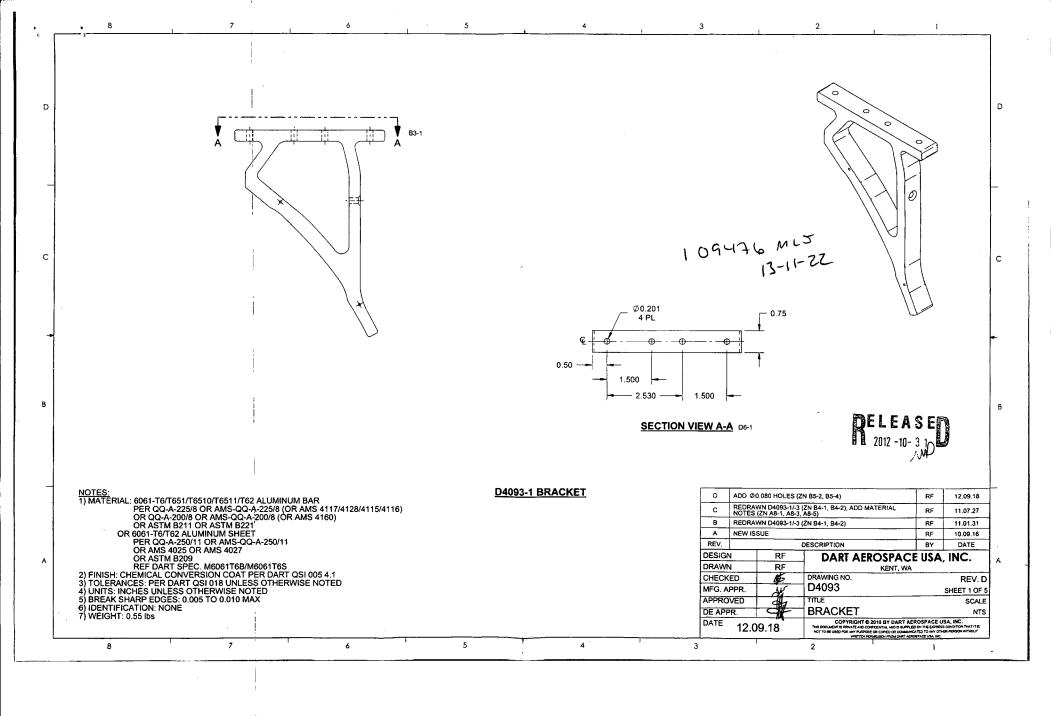
DART AEROSPACE LT	ΓD		Work Order:	109476
				D4002.2
Description: Bracket			Part Number:	D4093-3
Inspection Dwg: D4093	Rev: C	13.11.		Page 1 of 1

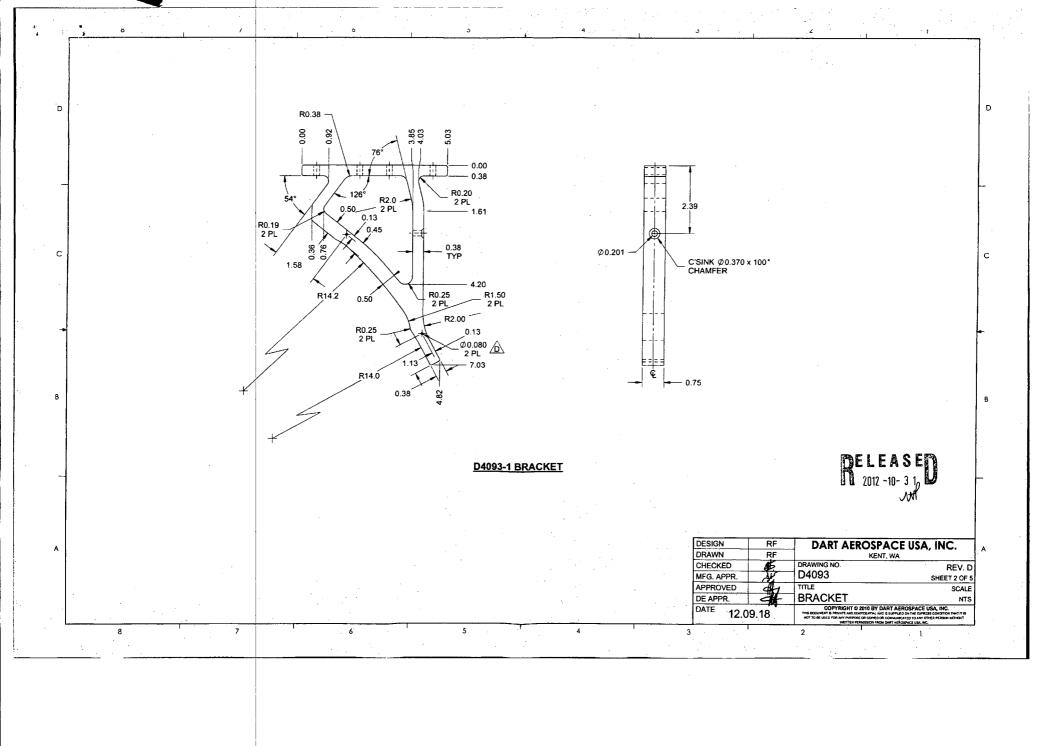
## FIRST ARTICLE INSPECTION CHECKLIST

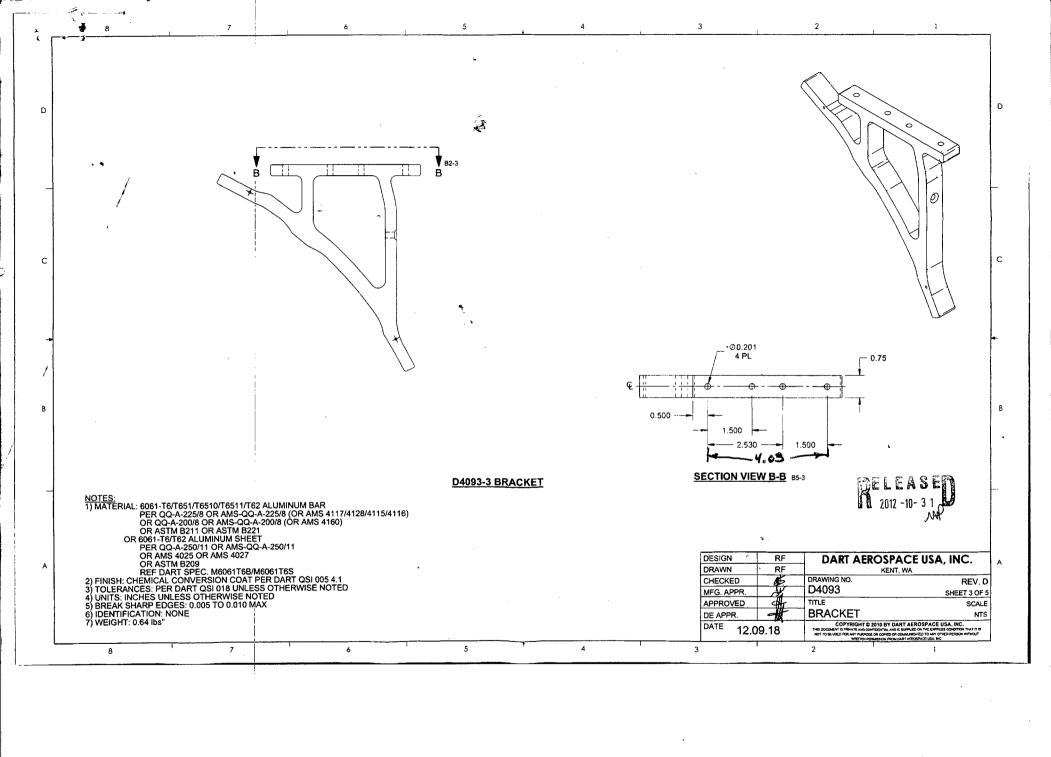
	1	ARTICLE III		T	г <del></del>	
Drawing	Tolerance	Actual	Accept	Reject	Method of Inspection	Comments
Dimension		Dimension			mapeotion	
1.05	+/-0.030	1.05	_			
3.85	+/-0.030	3:85"	<u> </u>			
5.03	+/-0.030	5.010	<u> </u>			
0.38	+/-0.030	6.369				
0.50	+/-0.030	0.50"	_			
4.82	+/-0.030	4.82	_			•
1.79	+/-0.030	1.79"				
0.38	+/-0.030	0.381"				
0.31	+/-0.030	0.31"	<u> </u>	·		
4.20	+/-0.030	4.20"				
7.03	+/-0.030	7.03				
0.750	+/-0.010	7.03'	_			
0.38	+/-0.030	0.38"				
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			DAC M	/		

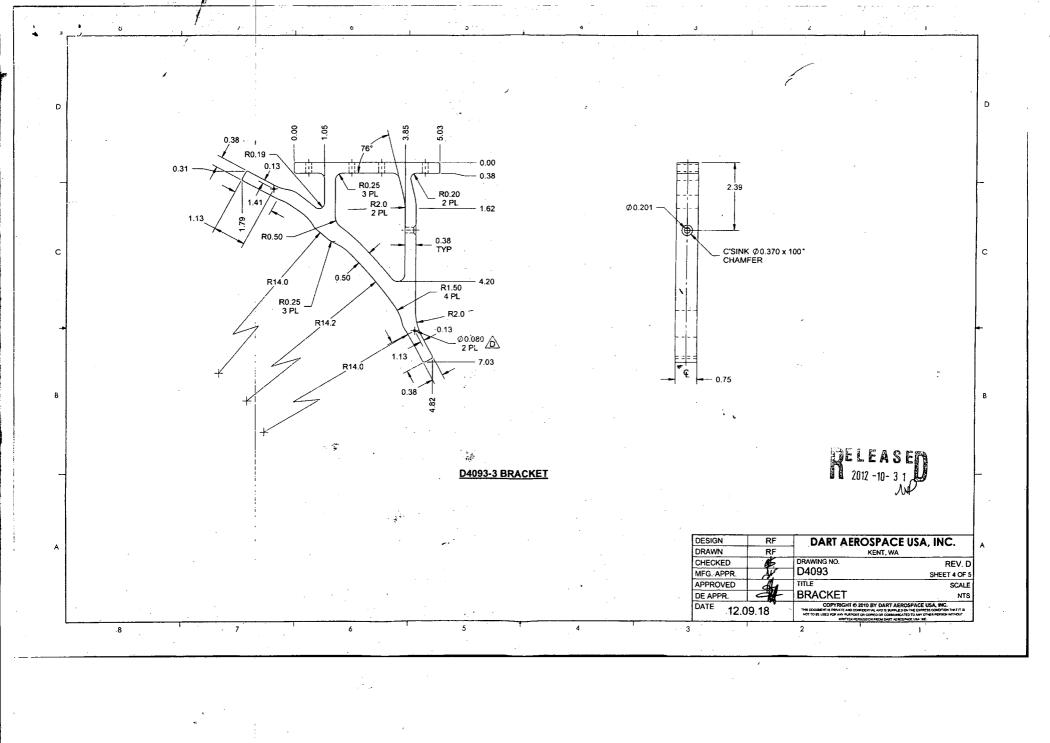
	NAC	<u> </u>
Measured by: Tm	Audited by: 08	Д. ⊖ Preliminary Approval:
Date: 13-11-28	Date: 13-12	~OG Date:

Rev	Date	Change	Revised by	Approved
Α	11.10.13	New Issue	KJ 95	A

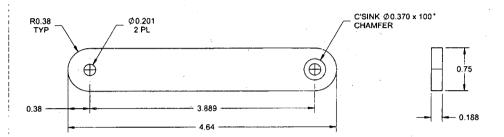








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## **D4093-5 BRACKET**

NOTES:
1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-220/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
OR 6061-T6/T62 ALUMINUM SHEET
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027
OR ASTM B209
OR ASTM B209
REF DART SPEC. M6061T6B/M6061T6S
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: 0.06 lbs

DESIGN	RF	DART AEROSPAC	CE USA, INC.
DRAWN	RF	KENT, WA	
CHECKED	1	DRAWING NO.	REV. D
MFG. APPR.	A.	D4093	SHEET 5 OF 5
APPROVED	Al-	TITLE	SCALE
DE APPR.		BRACKET	NTS
DATE 12.09.18		COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT S PRIVATE MIS CONFERENTIAL AND SERVICES OF THE CONFERENCE THAT IT IS NOT TO BE USED FOR ANY MURRIES ON CONFERCING CONFERENCE TO ANY THE PRIVATE METHOD.  **THE CONFERENCE THAT THE CONFERENCE CONFERENCE TO ANY THE PRIVATE METHOD.**  **THE CONFERENCE THAT THE CONFERENCE THAT THE CONFERENCE THAT THE METHOD.**  **THE CONFERENCE THAT THE CONFERENCE TH	

DART AEROSPACE LTD	Work Order:	109476
Description: REACKET	Part Number:	134093-3
Inspection Dwg: 1)4093 Rev: 1)		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

Drawing  Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.201	7.005	,202	~		D12-16	D'VERN.
,500	+.010	,501			1312-16	8 VERD
1.500	+ .010	1.499			DR-12	BUERN
2.530	<u>†</u> · 0/0	2.529	/		DR-16	D'VERN.
1.500	T .010	1,500.	/		DR-16	OUEZN
0.201	T-005	,aoa			812-16	8"VERN
2.39	F.030	2.391	سي		DR-16	B"VERN
0.370 x100°	010	0.378	·/		D17-16	B'VERN.
1.13	t-,030	1.134	~		DR-16	8"VERIO
,13	030	1.130			1318-16	8"VERW.
0.080	7.005	.082	/		D12-16	9"V+2N
1.13	±.030	1.134			DR-16	8" VERW
.13	7.030	.130	<u></u>		DR-16	BUVERN
Ø.08D	T:005 001	.082			DR-16	B"veen.

Measured by:	Audited by: De OR	Preliminary Approval:
Date: 13-11-30	Date: 13/12/06 289	Date:

Rev	Date	Change	Revised by Approved	
E	10.04.14	Added preliminary approval	KJ	